eliminating from the post-operative treatment of brain abscess the danger of unnecessary traumatism, he several years ago devised an instrument which was called an encephaloscope. This appliance was designed to permit, with the aid of artificial illumination, the critical inspection of the interior of a brain abscess cavity in such a manner as to avoid all violence to the brain tissue. Moreover, by the employment of this instrument, the introduction and proper adjustment of gauze or other drains in the depth of the wound, both at the time of operation and during subsequent dressings, became an exceedingly simple and altogether safe procedure.

OTITIC BRAIN ABSCESS FROM AN ANATOMIC AND CLINICAL POINT OF VIEW

By Alfred Wiener, M.D.

The author stated that the occurrence of brain abscess after purulent otitis media was a serious complication. Its localization, as well as its early recognition, was an urgent matter, but often a difficult task. Such abscesses followed both acute and chronic otitis media purulenta, especially the latter. According to Grunert, in 91 per cent. of the cases the abscess was due to a chronic suppuration of the middle ear. Hammerschlag, on the other hand, found only 75 per cent. due to that cause. In regard to their relative frequency, Jansen reported one brain abscess in 2,560 cases of acute, and six in 2,500 cases of chronic suppurative otitis media. It was a rather rare complication in early childhood, and the largest number occurred between the ages of ten and thirty years. They appeared to occur more frequently on the right side, according to Koerner and Koch. On the other hand, Okada Heimah and Neuman, whose statistics referred especially to cerebellar abscess, placed the percentage higher on the left side. In the large majority of cases, otitic brain abscess would be found to lie in close proximity to the primary suppuration in the petrous portion of the temporal bone, very often in direct communication with it. In the cerebellum it occupied most frequently the anterior portion of the lateral lobe. Extradural abscesses were found between the bone and the dura mater. As a rule, brain abscesses were solitary, and the contents of most abscesses was pus which might be of a fluid consistency or as thick as molasses.

Dr. Wiener then described in detail the clinical picture of otitic brain abscess, and, in closing his paper, he emphasized the following points:

1. In those cases in which it could be demonstrated that suppuration was still going on in the middle ear or contiguous parts, and one was reasonably sure that brain abscess complicated the condition, it was well to remember that in 57 per cent. of such cases the brain abscess and the suppurative condition in the ear were in direct communication.

2. There were cases in which the suppurative process in the ear was active, but the abscess was separated from the primary suppurative condition by normal brain tissue. This occurred in about 26 per cent. of the cases.

3. There were cases in which the suppurative condition in the ear had ceased, and there was every reason to believe that a brain abscess was present and to be accounted for by this previous suppuration. The abscess might lie in close proximity to the original trouble or at some distance

from it. In those cases no communication with the ear sinuses existed.

4. At times, otitic abscesses were latent, and might possess very thin walls. Furthermore, they might be situated dangerously near the ventricles or the arachnoid space. In operating on these cases, if the mastoid process was first attacked, the chiseling necessary might lead to rupture of the abscesses, with a rapidly fatal issue.

5. Such abscesses might exist in the latent stage for a long time, and become manifest after an ordinary trauma to the skull.

6. In all cases, Dr. Wiener said, it was his firm belief that even though the abscess might be suspected, we should deal most radically with the suppurative ear condition first, and then boldly attack the abscess.

Taking these anatomical and clinical facts into consideration in the treatment of otitic brain abscess, we should especially consider, first, the location of the abscess; second, its duration; third, its intimate connection with an existing suppurative process in the middle-ear cavity.

THE COMMON AND UNCOMMON LOCALIZATION OF OTITIC BRAIN ABSCESS, AS ILLUSTRATED BY THE CASES, WITH RECOVERY

By B. Sachs, M.D., and A. A. Berg, M.D.

The authors stated that of all brain lesions calling for operative interference, brain abscess, and particularly otitic brain abscess, had proved to be the most promising. Abscess following upon otitic and mastoid disease was situated commonly in the temporo-sphenoidal lobe, or in the cerebellum. It was far less common in other parts of the brain. When situated in the temporo-sphenoidal lobe of the left side, there would be, in addition to the general symptoms (such as headache, somnolence, nausea, vomiting, slight optic neuritis) slight hemiparesis and the symptoms of impairment of speech perception. While the patient might be able to articulate and to use language spontaneously, the perception and interpretation of speech might be more or less defective. Sensory aphasia was no doubt a very common accompaniment of otitic brain abscess situated in the temporo-sphenoidal lobe, more particularly if such abscess was in the left half of the brain. It was a symptom which was not always apparent unless specially examined for.

If the abscess was located in the cerebellum, there would be, in addition to the general abscess symptoms, cerebellar ataxia, a diminution of the deep reflexes, possibly abducens paresis or palsy, acoustic nerve symptoms and perhaps cerebellar seizures. If the lesion was in some other part of the brain, the symptoms due to involvement of that special portion, providing it was not a silent part of the brain, would be present, in addition to the symptoms referred to above.

The authors then reported in detail two cases of otitic brain abscess. The points of special intrest in the first case, from a neurological point of view, were that on account of the slight involvement of fibers coming down from the motor area, the subcortical location of the abscess was correctly surmised, while the rapid recovery from the speech defect and the disappearance of the motor paralytic symptoms in the extremities were astonishing. From a surgical standpoint, the case was of interest because it enabled one to open a discussion as to the best manner of approaching